

IN THE CLAIMS

Please cancel claims 1-8 and 21-34.

Below is a complete listing of the claims pending in this application:

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (Canceled)
5. (Canceled)
6. (Canceled)
7. (Canceled)
8. (Canceled)
9. (Currently Amended) A substantially crystalline graphitic carbon nanofiber [comprised of] consisting essentially of substantially graphite discontinuous sheets that are substantially parallel to the longitudinal axis of the [nanofibers] nanofiber, wherein the distance between graphite sheets is from about 0.335 nm to about 0.67 nm, and having a crystallinity greater than about 95%, wherein each of said graphite sheets are separate sheets, each having a top, a bottom and sides, which sheets are substantially parallel to each other.
10. (Original) The nanofiber of the claim 9 wherein the distance between the graphite sheets is from about 0.335 and 0.40 nm.
11. (Original) The nanofiber of claim 9 wherein at least a portion of the edge regions of the nanofiber contain a functional group selected from the group consisting of basic groups, acidic groups, and oxygenated groups.

12. (Original) The nanofiber of claim 11 wherein the functional group is a basic group that is a NH_4^+ group.
13. (Original) The nanofiber of claim 11 wherein the functional group is an acid group which is a COOH^- group.
14. (Original) The nanofiber of claim 11 wherein the functional group is an oxygenated group selected from the group consisting of hydroxyl, peroxide, ether, keto, and aldehyde.
15. (Currently Amended) A substantially crystalline graphitic carbon nanofiber [comprised] consisting essentially of continuous substantially graphite sheets that are substantially parallel to the longitudinal axis of the nanofibers and which has a substantially non-cylindrical multifaceted tubular structure, wherein the distance between graphite sheets is from about 0.335 nm to about 0.67 nm, and having a crystallinity greater than about 95%.
16. (Original) The nanofiber of the claim 15 wherein the distance between the graphite sheets is from about 0.335 and 0.40 nm.
17. (Original) The nanofiber of claim 15 wherein at least a portion of the edge regions of the nanofiber contain a functional group selected from the group consisting of basic groups, acidic groups, and oxygenated groups.
18. (Original) The nanofiber of claim 17 wherein the functional group is a basic group that is a NH_4^+ group.
19. (Original) The nanofiber of claim 17 wherein the functional group is an acid group which is a COOH^- group.
20. (Original) The nanofiber of claim 17 wherein the functional group is an oxygenated group selected from the group consisting of hydroxyl, peroxide, ether, keto, and aldehyde.
21. (Canceled)
22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Canceled)

30. (Canceled)

31. (Canceled)

32. (Canceled)

33. (Canceled)

34. (Canceled)